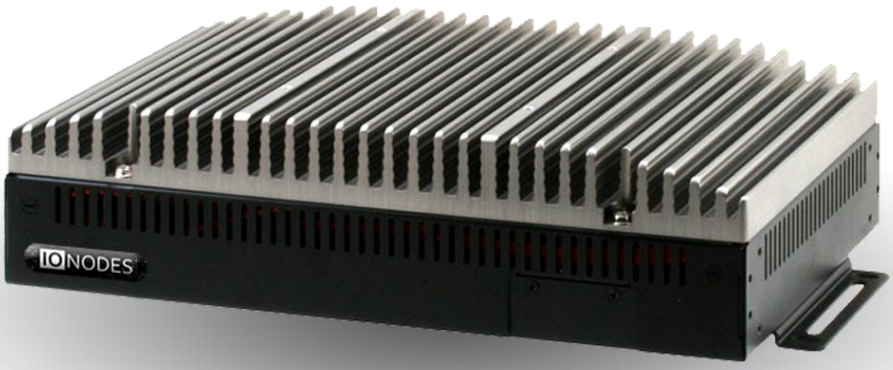
CR15 Series

User Manual

Version 1.2



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CIRRUS CR Series

User Guide

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The following words and symbols mark special messages throughout this guide:

Warning:	Text set off in this manner indicates that failure to follow directions could result in damage to persons or equipment.

Note:	Text set off in this manner indicates special instructions which should be paid attention to.

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1 Important Safety Instructions

WARNING: Read and save these instructions! Follow all warnings and instructions specified within this document and/or on the equipment.

CAUTION: There is no ON/OFF SWITCH for the power supply. The unit will be powered on upon connecting a valid power supply source. Please make sure to properly shutdown the device's operating system prior to removing its power source.

This CIRRUS CR Series equipment is designed to be installed within an environment that provides a pollution degree max. 2 and category II NON HAZARDOUS LOCATIONS, and within indoor conditions only. The equipment shall be installed in a FIXED or DESKTOP configuration and should be installed by qualified personnel only (person having the appropriate technical training and experience necessary for product installation).

When installing the equipment, please make sure that cables are installed so that accidents cannot occur. Cables connected to the equipment must not be subject to any mechanical strain.

To reduce the risk of fire, electric shock and/or injury, observe the following:

- Do not position the equipment as such that persons could walk on the connected cables.
- Do not spill any type of liquid substance on or near the equipment.
- Do not touch the equipment and its connected cables during an electrical storm; there may be a risk of electric shock.
- Do not attempt to connect this equipment to electrical outlets controlled by switches or automatic timers.
- Do not attempt to perform hardware service on this product yourself. Opening the equipment casing may expose you to dangerous voltage or other risks. Refer servicing to IONODEs technical service personnel. Never open the device yourself as this will void the warranty.
- The equipment should be situated away from heat sources such as radiators, heat registers, stoves, or other products that produce heat.
- Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.
- DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW 0°C (32°F) OR ABOVE 40°C (104°F). IT MAY DAMAGE THE EQUIPMENT.

Note: Opening the equipment case, damaging or altering the tamper proof label will void the warranty.

Note: **FCC**: This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

2 Cleaning Instructions

- Unplug this product from the wall outlet before cleaning.
- Use a soft dry cloth for cleaning.
- For stubborn dirt, soak the cloth in a weak detergent solution, wring well and wipe. Use a dry cloth to wipe it dry. Do not use any type of solvent, such as thinner and benzene, as they may damage the surface of the product.

3 Handling Notes

When shipping the product, the original shipping carton and packing materials should to be used. For maximum protection, repack the unit as it was originally packed at our factory.

Do not use volatile liquids, such as insect spray, near the unit. Do not leave rubber or plastic products in contact with the product for long periods of time. They will leave marks on the surface finish.

4 Moisture and Condensation Notes

Moisture condensation will damage the product. Read the following notes carefully.

Moisture condensation occurs during the following cases:

- Transferring the product directly from a cold place to a warm place.
- Using the product in a room where you just turned on the heater, or a place where the cold wind from an air conditioning unit directly hits the unit.
- In the summer, when moving the product to a hot and humid place after leaving an air conditioned space.
- Using the product in a humid place.

Warning: Do not use the product when moisture or condensation may occur. If the product is used in such an environment, it may damage discs and internal parts.

5 Product Description

The CIRRUS CR series of compact IP video appliances deliver enterprise-class video recording and management solutions to small, medium and large single or multi-site surveillance deployments. These appliances provide an embedded, high-performance networked video platform capable of recording multiple cameras with high sustained data throughputs to meet a multitude of requirements. The CIRRUS CR series appliances can host enterprise class video management (VMS) software solutions commonly used in the market. With a pre-loaded operating system and VMS software package, IONODES takes the hassle away from complex set-up and configuration of an IP video management environment. Validating, certifying and embedding all OS and software components into a simple and easy to use platform means you spend less time configuring your system, and more time operating it to secure your environment.

Combining the CIRRUS CR series appliances with your IP cameras and IP video encoders of choice provides a cost-effective means to convert legacy analog video systems to IP, and build new, state of the art, IP video surveillance deployments. The CIRRUS CR series supports all IP cameras and IP video encoders supported by all major VMS solutions.

The CIRRUS CR Series appliances and VMS software combine to provide innovative configuration options and tools that significantly decrease the deployment time and the effort needed to deploy your security solution. Simply connect a USB keyboard, mouse and monitor to the appliance and you are ready to add your IP cameras and encoders to your video system. Alternatively, remote configuration is also possible via network web access or VMS client application(s).

To support a wide range of deployment scenarios, while ensuring reliability and high availability, the CIRRUS CR Series appliances use industrial grade components and high-performance storage drives designed for 24/7 video recording.

6 CIRRUS CR Series Appliance Features

This chapter introduces you to the basic features of your CIRRUS CR Series appliance. Read this chapter to learn:

- About unpacking your appliance
- How to identify the features of your appliance
- How to locate your appliance's model and serial number
- What accessories are available for your appliance

6.1 What is in the Box

Note: Verify that the shipping box contains the following parts and ensure no damage was sustained during shipment. If there is anything missing or damaged, please contact your sales representative.

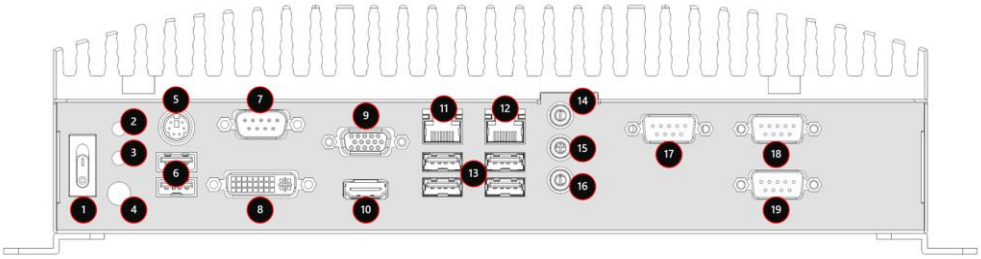
You appliance should be packed with the following:

1. CIRRUS CR15 Series appliance
2. AC/DC power adapter (12VDC)
3. Power supply cord (region specific)
4. Wall mount brackets (2)
5. Mounting screws for brackets (4)
6. USB Utility Key

Below are additional items which are not included but may be required:

1. USB mouse & keyboard
2. Computer monitor (VGA)
3. Internet access and/or a network switch
4. Power bar with surge protection

6.2 Front and rear panel controls and LEDs



6.2.1 Rear Panel

Your CIRRUS CR Series appliance has the following components accessible from the **rear** panel:

1. Power Button
2. HDD Activity LED
3. System Status LED
4. Power Jack (DC-IN 12VDC)
5. PS2 Keyboard/Mouse
6. 2 x USB 2.0 Ports
7. COM1 Serial Port
8. DVI Display Output
9. VGA Display Output
10. HDMI Display Output
11. Gigabit LAN #1
12. Gigabit LAN #2
13. 4 x USB 2.0 Ports
14. Audio Line In
15. Audio Line Out
16. Audio Mic In
17. COM4 Serial Port
18. COM2 Serial Port
19. COM3 Serial Port

6.3 Identifying your model and serial number

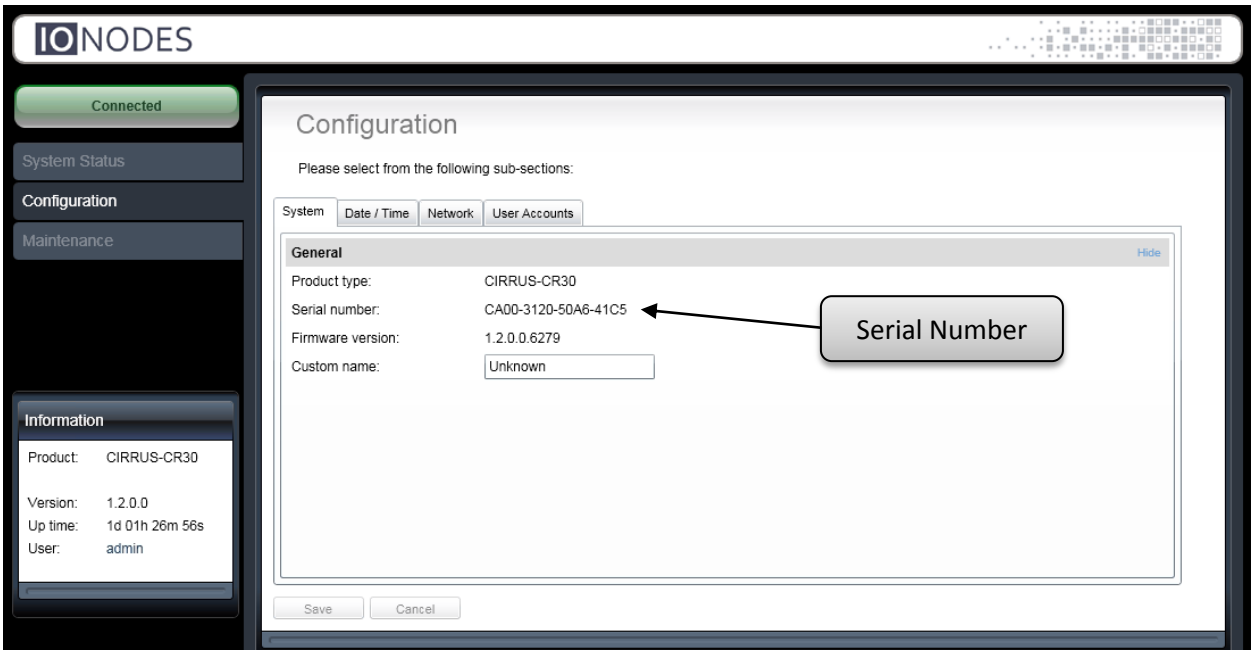
6.3.1 Appliance Model Number

The label on the bottom of your appliance case contains information that identifies your exact appliance model number. A similar label is also located on the product box. IONODES technical support staff may need this information if you call for assistance.

6.3.2 Appliance Serial Number

You can locate the appliance's serial number:

- Printed on a white label located on the bottom of your appliance case.
- Printed on the packing slip that came with your appliance.
- Displayed in appliance's web interface:
    - Double-click on the **Device Config** icon located on the system desktop.
    - Log into the web interface (default username and password are both "admin").
    - Once logged in, select the **Configuration** tab from the left hand side bar.
    - The Default tab shown is the System tab which contains your device serial number along with the Product type and Firmware version.



Note: A Microsoft Windows Embedded Standard Certificate of Authenticity label is located inside the appliance; it is not accessible to you directly.

6.4 Options and accessories

The following options and accessories are available for your appliance:

1. WIFI 802.11 b/g/n + Bluetooth 3.0 Module

2. Additional 12VDC Power Adapter with Power Cord
   - 12VDC @ 84W Power Adapter – North American Plug
   - 12VDC @ 84W Power Adapter – EU & UK Plug

7 Getting Started

7.1 Hardware Installation

The CIRRUS CR Series appliance can be mounted in any orientation (horizontally or vertically) on a desktop / shelf or a wall using the supplied mounting brackets.

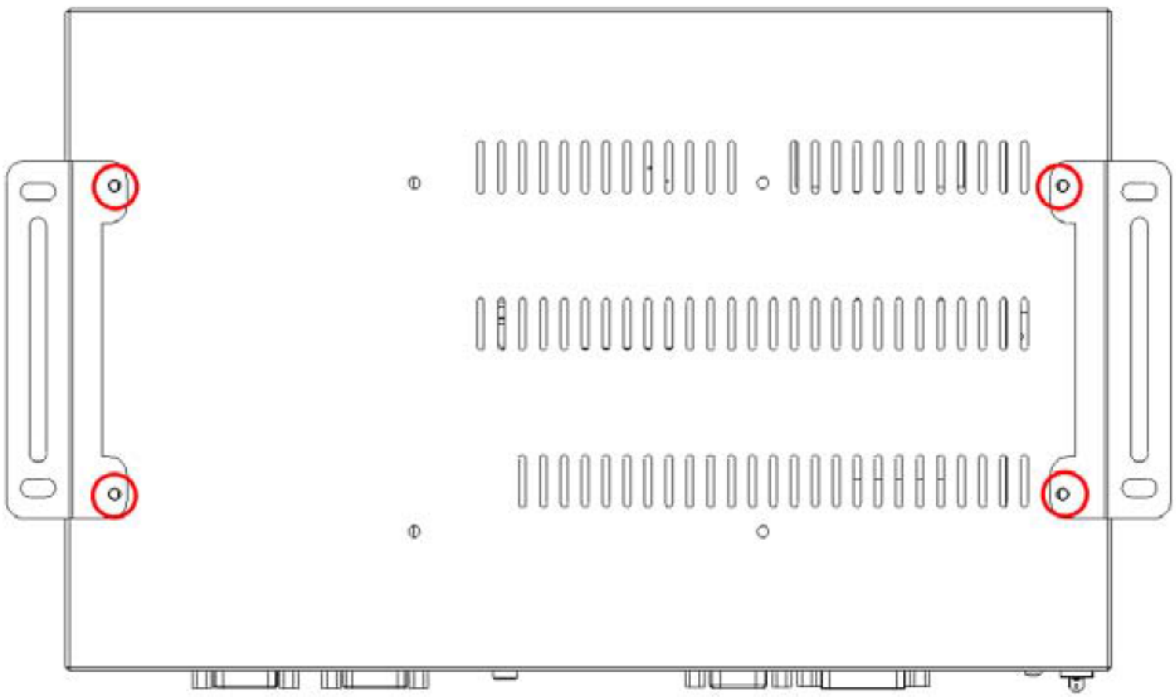
Warning: The appliance benefits from ambient air circulation. Do not obstruct ambient air circulation to avoid overheating the unit and reducing its performance and functional lifespan.

7.1.1 Desktop Installation

- Place the appliance on a clean level surface.
    - Ensure adequate clearance for cooling.

7.1.2 Wall Mount Installation

- Attach the wall mount brackets to the bottom side of the device using the 4 supplied screws.
    - Attach the appliance to the wall using the holes in the wall mount brackets.
    - Use #8 1.25” screws and weight appropriate drywall anchors (not supplied).
- If possible, ensure at least one screw on each bracket goes into a wall stud.



7.2 Keyboard & Mouse Setup

It is recommended that a USB keyboard & mouse be attached to the appliance in order to facilitate local setup and configuration. Plug the keyboard & mouse either to the USB ports or PS/2 port located on the rear panel of the appliance.

Note: The first time the system is started with a USB keyboard and mouse, please allow some time for the operating system to detect them before they are ready for use.

7.3 Monitor Setup

Your CIRRUS CR Series appliance comes with a multitude of monitor display configuration options. The appliance itself provides three display output ports: one VGA, one DVI and one HDMI. You may use any output in single output mode or you may use one of the following combinations for multi-display mode:

- VGA + HDMI (dual display)
- VGA + DVI (dual display)

In multi display mode, you system will use one display as primary display and the other(s) as secondary display. The order and position of the displays is configurable using the operating system's display configuration menu.

7.4 Network Setup

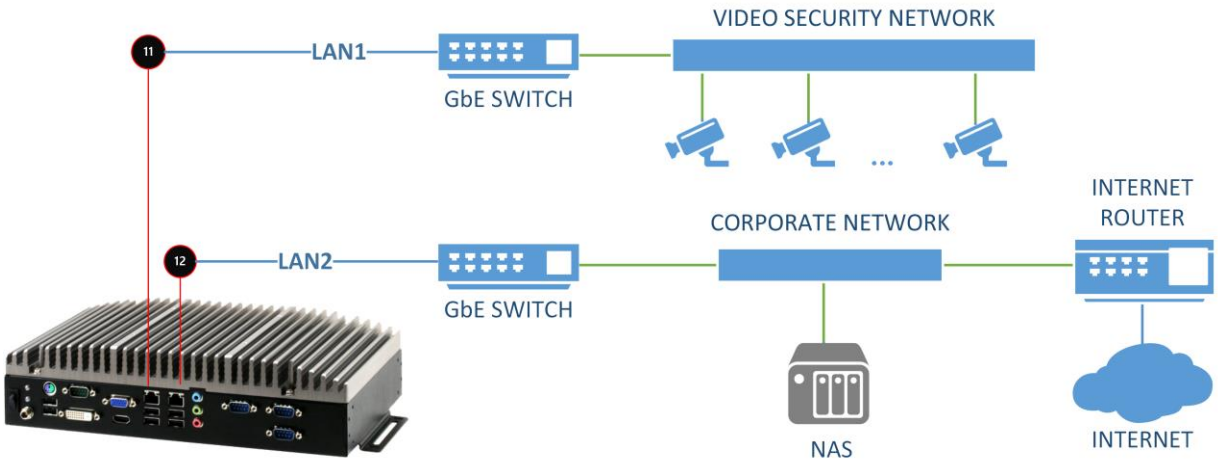
The CIRRUS CR Series appliance features two distinct Gigabit Ethernet network ports located on the rear side. These ports, LAN1 and LAN2, may be used for single or dual network configurations depending on the complexity of your installation.

7.4.1 Enterprise Network

In medium to large installations, your installation may require a dual network configuration where one network is reserved for corporate activities (or NAS storage) and a secondary network is set up for the video security network.

In this scenario:

- Connect the LAN1 network port of the appliance to the video security network
  - This connection is where would be connected your IP cameras
- Connect the LAN2 network port of the appliance to the corporate network or NAS device
  - This connection could also provide internet access if required



Note: In order to make full use of multicast streaming, you need to ensure that your network equipment is capable of properly managing multicast registrations. If unsure, please contact your IT administrator.

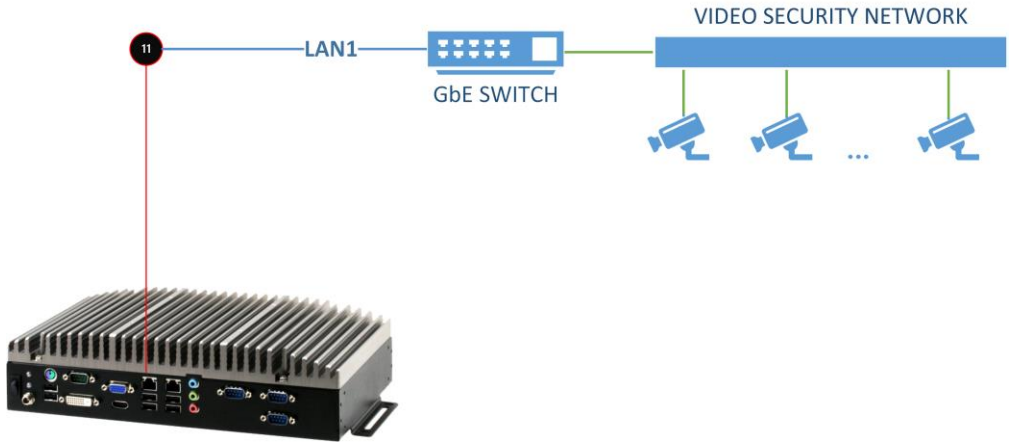
Note: In this scenario, you may run software clients on the corporate network to view live or recorded video content, however note that this will generate streaming on the corporate network; this may be undesirable.

7.4.2 Standalone Video Network

In smaller installations, your installation may only require a single network configuration where the network is reserved for video security.

In this scenario:

- Connect the LAN1 network port of the appliance to the video security network
    - This connection is where would be connected your IP cameras



7.5 External Storage

The CIRRUS CR Series appliance is equipped with six (6) USB 2.0 ports, as well as a secondary Gigabit Ethernet port, to allow for connecting external storage. Using external storage is useful if the internal storage is not sufficient to meet your target video retention times.

The secondary Ethernet port may be used to connect to network storage solutions such as iSCSI storage devices. The USB 2.0 ports may be used to connect to USB 2.0 storage devices.

Once discovered by the appliance, external storage can be used by your video management software as a storage device.

Warning: It is not recommended to use USB 2.0 storage for video recording operations due to performance limitations of USB 2.0. You may use USB 2.0 storage for video export functions and other non-realtime data transfer operations.

7.6 Power Setup

Once all above setup steps have been completed attach the supplied AC/DC power adapter to the appliance. Connect the DC side of the power adapter to the power supply input located on the rear panel of the appliance. You can then connect the AC side of the power adapter to a wall socket or power bar.

Note: The appliance is configured to automatically boot up as soon as power is applied. There is no ON/OFF button to control power to the device.

Warning: To reduce the risk of electrical shock or damage to the equipment:

Do not disable the power grounding plug. The grounding plug is an important safety feature.

If the electrical plug you are using does not have a ground plug receptacle, contact a licensed electrician to have it replaced with a grounded electrical outlet.

Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.

Disconnect the power from the appliance by unplugging the power cord either from the electrical outlet or the computer.

8 Software Environment

Your appliance is pre-configured with an operating system as well as a **Quick Setup Wizard** to assist you in setting up your chosen video management software. It is not recommended that you remove, modify or add software to your appliance unless required by your deployment scenario.

8.1 Pre-Packaged Video Management Software (VMS)

All CIRRUS CR Series IP recording appliances are delivered with a fully customizable software environment, pre-loaded and ready to go. Most major VMS platform packages are included with the appliance and have been tested to ensure reliable performance expected from a video management platform.

- Genetec Omnicast & Security Center
- Milestone Systems XProtect
- ExacqVision
- Avigilon
- Axis Camera Station
- Others…

The Quick Setup Wizard allows you, at first boot time, to select the VMS platform package you wish to deploy to your appliance.

Note: You can also set-up your appliance with a plain Windows Embedded Standard 7 image if required so that you may control the software environment.

8.2 Anti-Virus Software

Because of a high risk of system performance depreciation, we do not recommend using an anti-virus program with your CIRRUS CR Series video recording appliance.

Should your installation require anti-virus software, ensure that the video file extensions (*.avi, *.asf, etc...) for your chosen VMS software are exempted from scans. This will make sure that video files are not scanned, thus avoiding any performance issues.

8.3 Software Updates

We do not recommend installing any application updates unless absolutely necessary.

We also do not recommend enabling automatic updates for the Windows operating system or performing any operating system or drive updates manually; the software environment shipped with your device has been tested to perform as specified, any updates may alter the system's behaviour.

Note: Automatic Windows Updates are disabled by default in all appliances; this is the desired setting.

8.4 Remote Access

By default, your appliance is configured to permit remote desktop connections. This feature of the Windows operating system allows you to remotely access your appliance from any other computer on your network using your Windows account credentials.

Note: You can disable this feature via the Windows control panel. For details on how to do this, consult your IT administrator.

9 Basic Operating Instructions

9.1 Powering on the appliance

1. Turn on the monitor(s) and any external peripherals (ex. Printers, External Storage Devices, etc.) connected to the appliance.

2. Connect the AC/DC power adapter to the appliance.

3. The appliance will boot automatically.

4. The appliance will run a series of self-tests. After a few seconds, a series of messages may be displayed as the various hardware and software subsystems are activated. Under normal circumstances you should not be asked to respond to these messages. If you are asked to respond any messages follow the instructions carefully.

5. If this is the first time you are booting the appliance, the **Quick Setup Wizard** welcome screen will appear.

6. If the **Quick Setup Wizard** has already been completed in a previous user session, a Windows login prompt will be displayed once the appliance has completed its boot up phase.

Note: Default login username is 'admin' and default password is 'admin'

9.2 Powering off the appliance

1. You may initiate a power down of the device by one of two ways:
   a. Push and immediately release the power button located on the front panel of the device.

      OR

   b. Click on the Windows START button located on the bottom left of the screen and then click on the SHUT DOWN button.

2. Both methods above will cause the software to shut itself down properly.

3. The appliance may take a few minutes to complete its shut down.

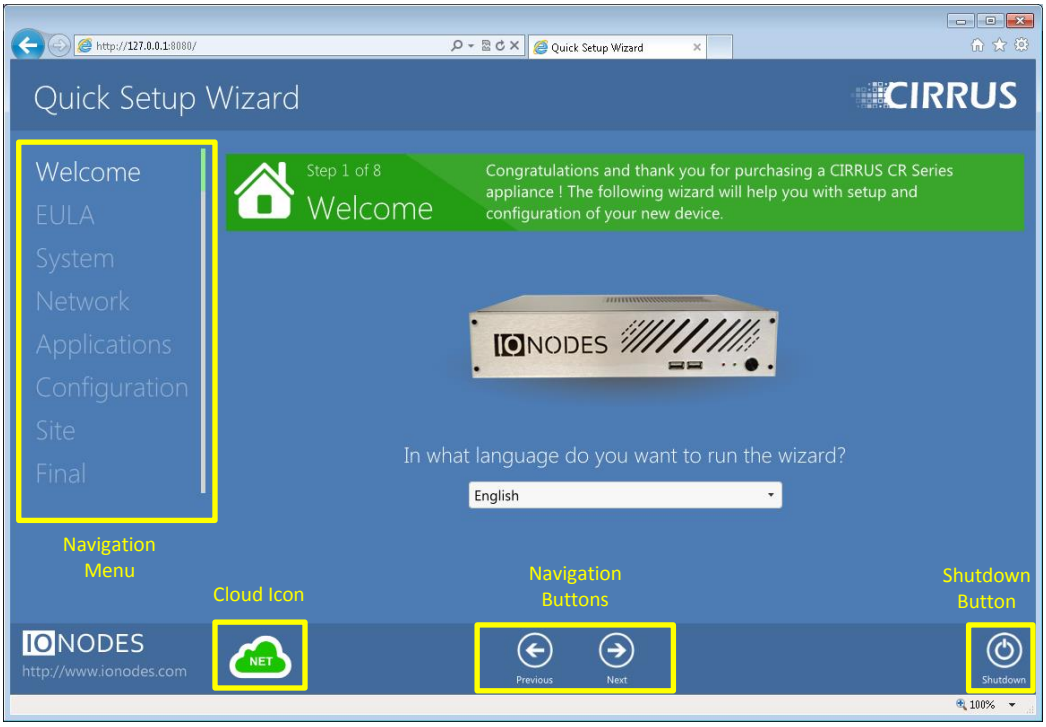
Warning: Always be sure to follow the proper procedures when turning off the power to the appliance. NEVER disconnect the power to the device while it is still running or in the process of shutting down. Doing so can cause data loss, file corruption, system instability and hardware failure

9.3 Quick Setup Wizard

The Quick Setup Wizard is a setup and configuration assistant which appears the first time you boot a CIRRUS CR Series appliance. It is designed to simplify the configuration of basic device settings and allows you to select the VMS platform package you wish to deploy.

The devices ship with pre-loaded VMS platform packages, which are shown during the application setup phase of the wizard. However, more recent versions of these packages, or entirely new VMS platform packages, are regularly updated on the IONODES online cloud storage – these can be downloaded via the wizard as well.

9.3.1 General Layout



- Navigation Menu
  - This menu allows you to navigate directly to any wizard page
  - The current wizard page is highlighted
  - The colored bar on the right displays completion status of the page
    - Gray = Not Visited
    - Green = Complete
    - Red = Incomplete; invalid values

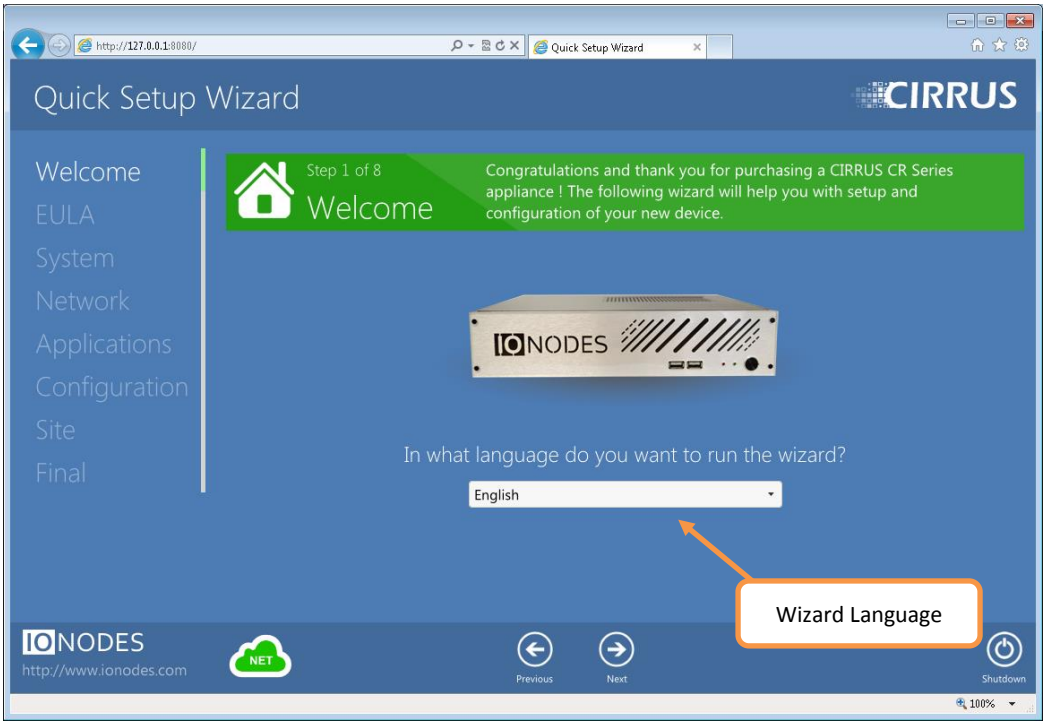
- Navigation Buttons
  - These buttons allow you to navigate forward and backwards through the wizard pages

- Shutdown Button
  - This button allows you to cancel execution of the wizard and shutdown the device
  - Upon next boot-up, the wizard will reappear since it has not been completed

- Cloud Icon
    - This icon will be coloured gray when no Internet connection is detected
    - This icon will be coloured green when a valid Internet connection is detected
    - An Internet connection is required for online operations

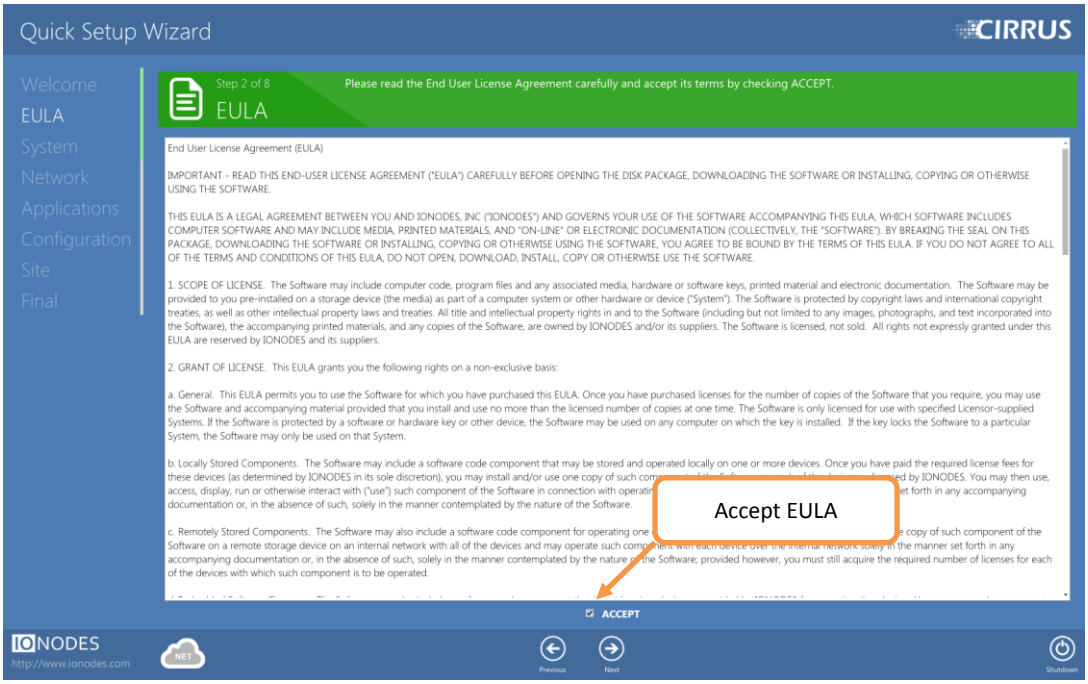
9.3.2 Welcome Page

The welcome page allows you to select the language in which to run the wizard pages. This language will not be installed as the language for the operating system or installed software.



9.3.3 EULA Page

The EULA page displays the end user license agreement which you must accept prior to completing the Quick Setup Wizard. Click on the **Accept** check-box to continue.


Quick Setup Wizard
CIRRUS
Welcome
EULA
System
Network
Applications
Configuration
Site
Final
Step 2 of 8
EULA
Please read the End User License Agreement carefully and accept its terms by checking ACCEPT.
End User License Agreement (EULA)
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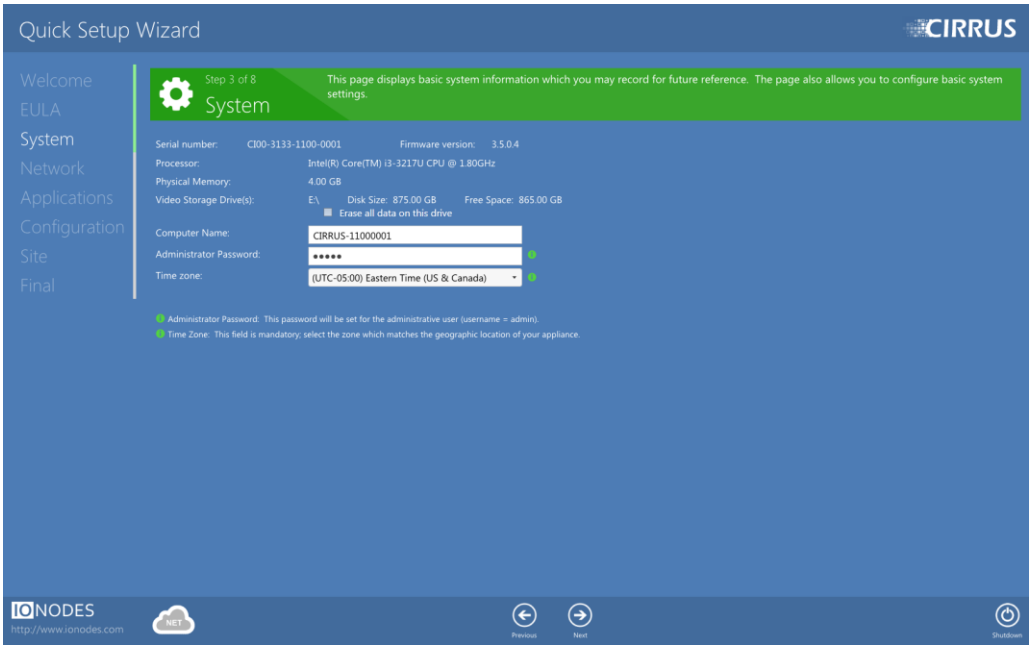
c. Remotely Stored Components. The Software may also include a software code component for operating one copy of such component of the Software on a remote storage device on an internal network with all of the devices and may operate such com with each device over the internal network solely in the manner set forth in any accompanying documentation or, in the absence of such, solely in the manner contemplated by the nature of the Software; provided however, you must still acquire the required number of licenses for each of the devices with which such component is to be operated.
Accept EULA
ACCEPT
IONODES
http://www.ionodes.com
Previous
Next
Shutdown

9.3.4 System Page

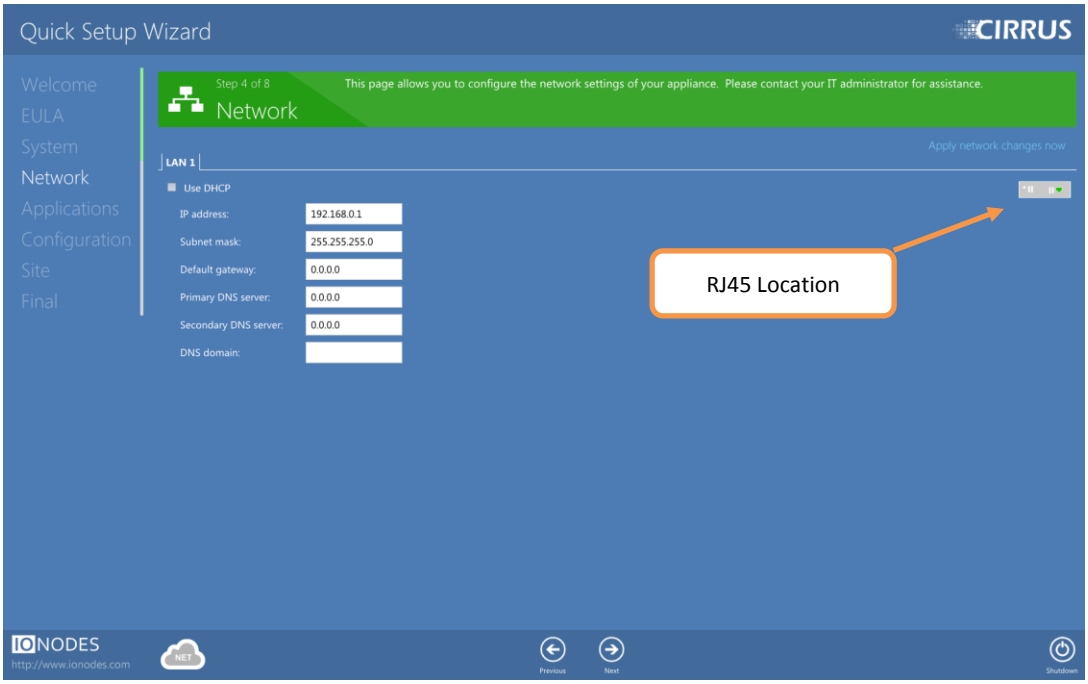
The system page displays basic status information on your device and allows you to specify basic system settings.


Quick Setup Wizard
CIRRUS
Welcome
EULA
System
Network
Applications
Configuration
Site
Final
Step 3 of 8
System
This page displays basic system information which you may record for future reference. The page also allows you to configure basic system settings.
Serial number: CI00-3133-1100-0001
Firmware version: 3.5.0.4
Processor: Intel(R) Core(TM) i3-3217U CPU @ 1.80GHz
Physical Memory: 4.00 GB
Video Storage Drive(s): E:\ Disk Size: 875.00 GB Free Space: 865.00 GB
Erase all data on this drive
Computer Name: CIRRUS-11000001
Administrator Password: •••••
Time zone: (UTC-05:00) Eastern Time (US & Canada)
Administrator Password: This password will be set for the administrative user (username = admin).
Time Zone: This field is mandatory; select the zone which matches the geographic location of your appliance.
IONODES
http://www.ionodes.com
Previous
Next
Shutdown

- Serial Number – This serial number may be required should you need to place a support call.
- Firmware Version – This is the version of the device's internal software services. This is not the version of the operating system or any installed VMS software.
- Processor – This is the processor type installed in your device.
- Physical Memory – This is the amount of RAM memory installed in your device.
- Video Storage Drive(s) – This section lists the drives which are available for video storage.
    - The **Erase all data on this drive** checkbox allows you to instruct the wizard to delete all data found on the data drive. This will not erase factory data located on the SSD boot partitions.
- Computer Name – This is the computer name as it will appear on the network.
- Administrator Password – This is the password which will be set for the "admin" user account. This password will be set for the administrator login account of the operating system as well as for the administrator user account of the device's web interface.
- Time Zone – This is the geographic time zone which will be set for your device.

9.3.5 Network Page

The network page allows you to specify the network configuration for the network port(s) of the device (LAN1 and/or LAN2). You may apply the changes immediately by clicking on **Apply network changes now** to test out your network settings or to allow the wizard to connect to an Internet-enable network. Upon successful connection to an Internet-enabled network, the cloud icon located on the bottom left of the screen will turn to green.



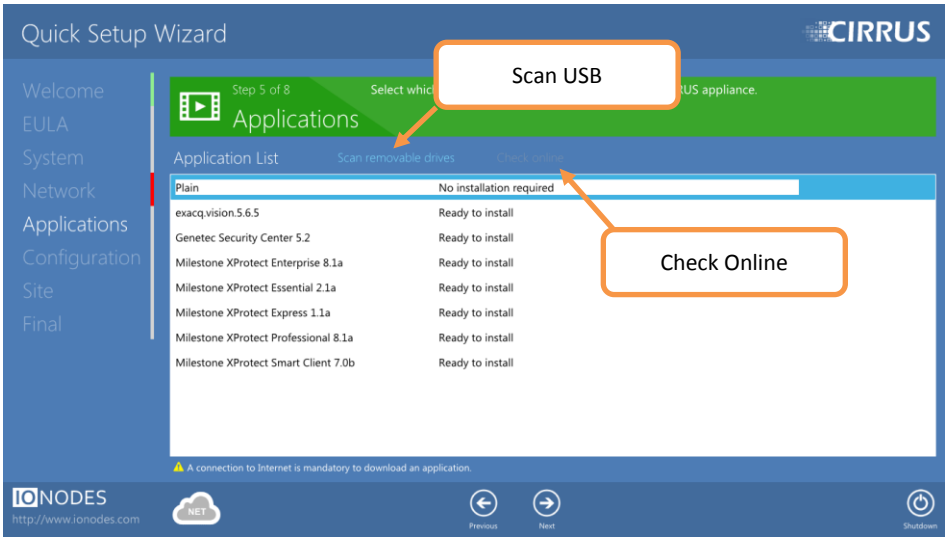
Note: Note: An icon indicating the matching connector for each network adaptor is displayed beside each LAN connection.

9.3.6 Applications Page

The applications page allows you to select which software package to deploy onto the device. By default, a number of packages are shipped with the device and are located on the **packages** folder of the data drive. The **Quick Setup Wizard** automatically detects all packages found in this folder and displays them in the application list.

You may request that the wizard search for any new or updated application packages by clicking on the **Check Online** menu action. This will cause the device to query the IONODES cloud for any package. Should a new package be found, it will be displayed in the list but will be marked as ready to download. Should you want to select a newly detected package for installation, you must first download the package by clicking on the download link. Download progress will be displayed with estimated time and percentage of completion.

Should you have an application package on a USB key, you may select the **Scan removable drives** menu action.

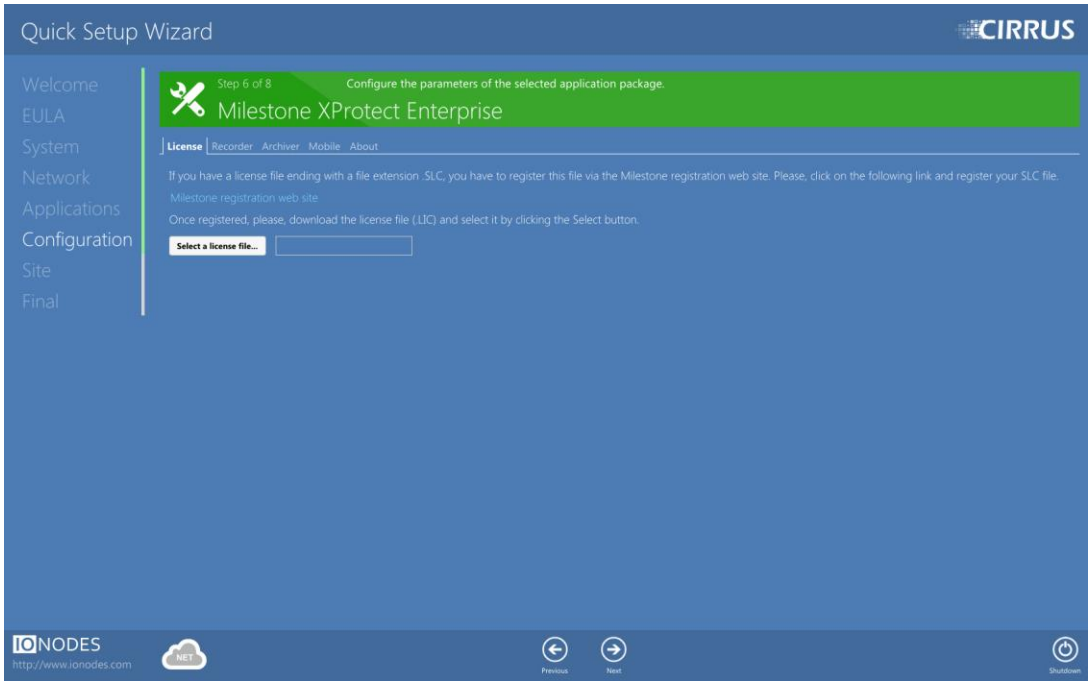


Note: In order to deploy as plain operating system without any VMS or other specific package, select the **Plain** option.

Note: The **Check Online** menu action is only available if your device is connected to an Internet-enabled network, at which time the cloud icon will be green instead of gray.

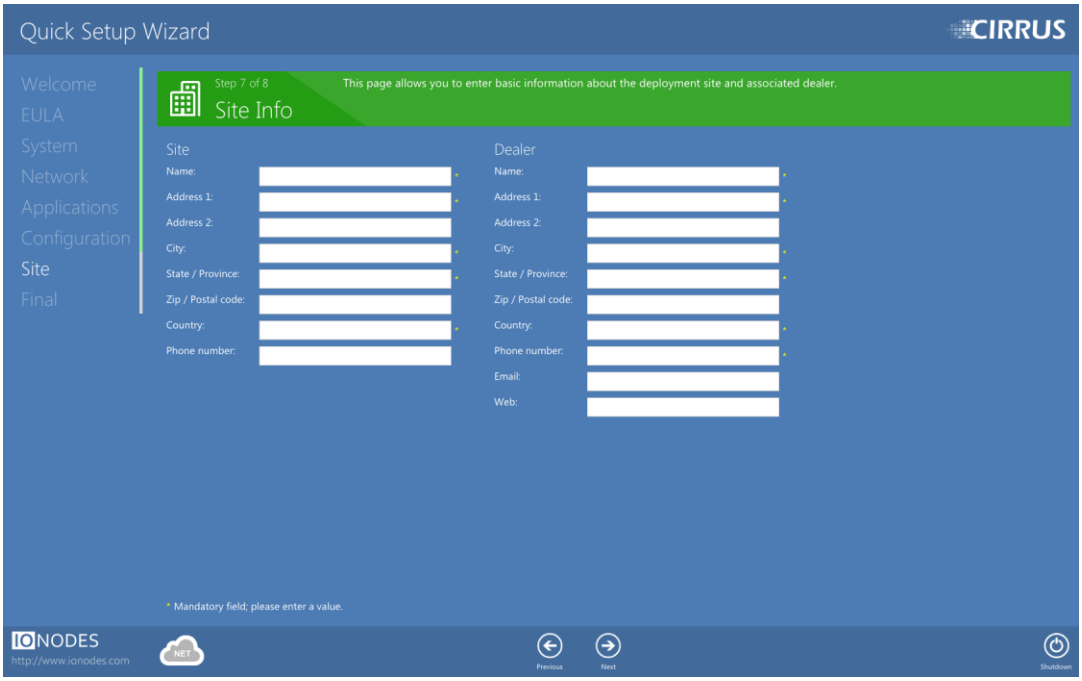
9.3.7 Configuration Page

Depending on the application package selected in the previous step, you may be asked to configure application specific parameters. These settings are presented in the configurations page.



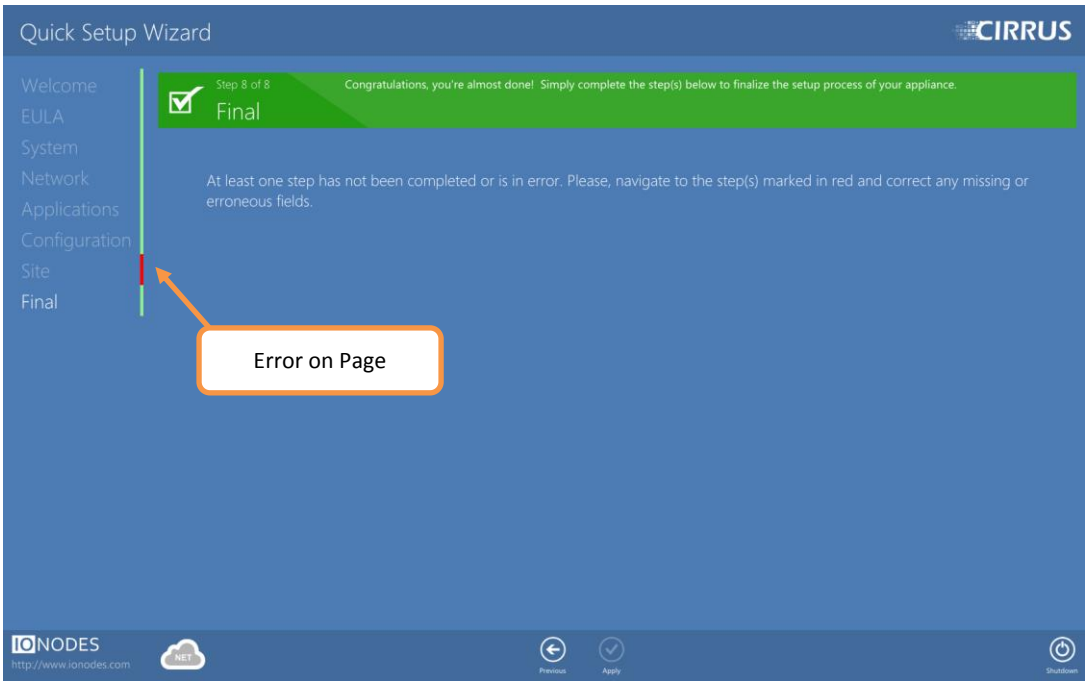
9.3.8 Site Page

The site page allows you to enter site and dealer information. This information will be kept inside the device's configuration and may be useful as future reference for any support call.



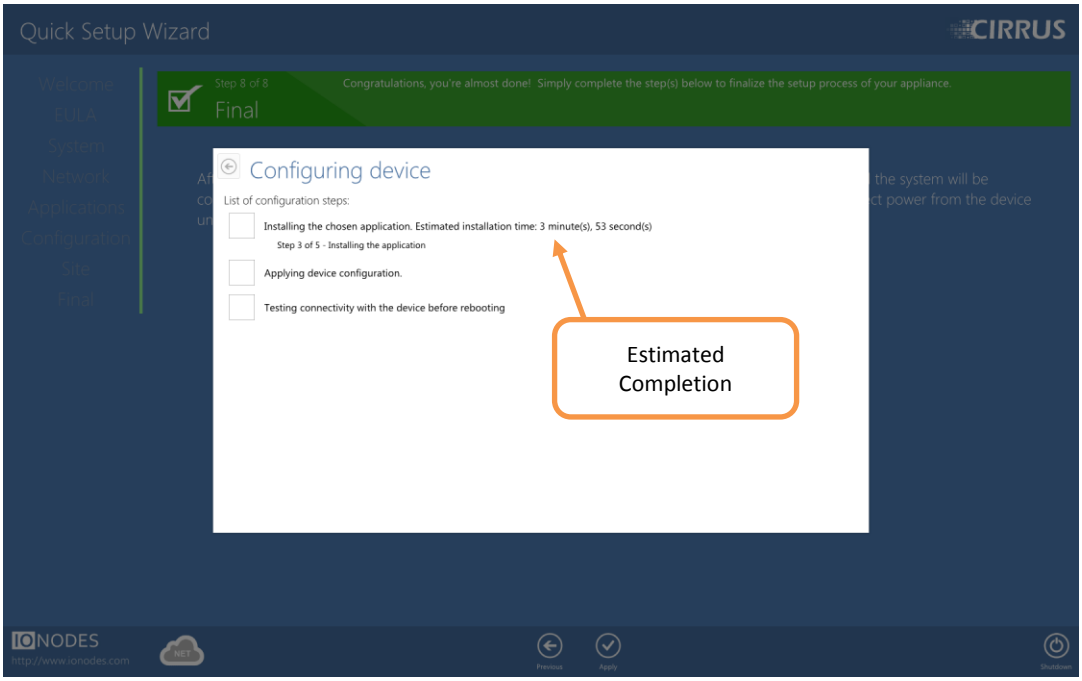
9.3.9 Final Page

The final page displays the final status of the wizard prior to applying the desired configuration and before deploying the selected application package. Please confirm that all wizard pages have been completed as desired prior to clicking on the **Apply** button. Should any wizard page be incomplete or contain invalid parameters, the **Apply** button will be unavailable; please correct any errors and retry.



Quick Setup Wizard
CIRRUS
Welcome
EULA
System
Network
Applications
Configuration
Site
Final
Step 8 of 8
Final
Congratulations, you're almost done! Simply complete the step(s) below to finalize the setup process of your appliance.
After clicking APPLY in this final step, the selected application package will be deployed to the device and the system will be configured with the entered information. This process could take several minutes. Please do not disconnect power from the device until this operation has completed.
Complete Wizard
IONODES
http://www.ionodes.com
Previous
Apply
Shutdown

After clicking on the **Apply** button, a popup window will appear showing installation progress. Once installation is complete, the system will shut down and reboot automatically.



9.4 Initial Configuration Steps

9.4.1 Securing access to your appliance

By default, the appliance is shipped with default username and passwords for access to the various administrative interfaces of the system.

We strongly recommend that you change the default administrative passwords in order to ensure that no unauthorized accesses are performed.

1. Log into the Windows operating system using the default admin username and password ('admin' / 'admin').

2. Press **CTRL + ALT + DELETE** from the appliance operating system to display the Windows system menu.

3. Choose the **Change Password** menu option and follow the steps required to change the default admin password.

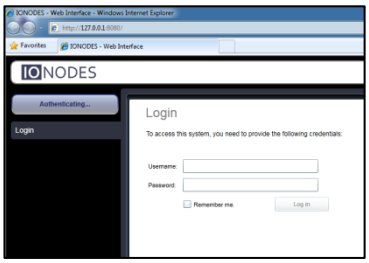
9.5 Accessing the appliance web interface

The CIRRUS CR Series appliances feature a web interface which provides a simple and clear display of the configurable parameters of the appliance as well as providing system status information and diagnostic tools.

The web interface can be accessed in several ways.

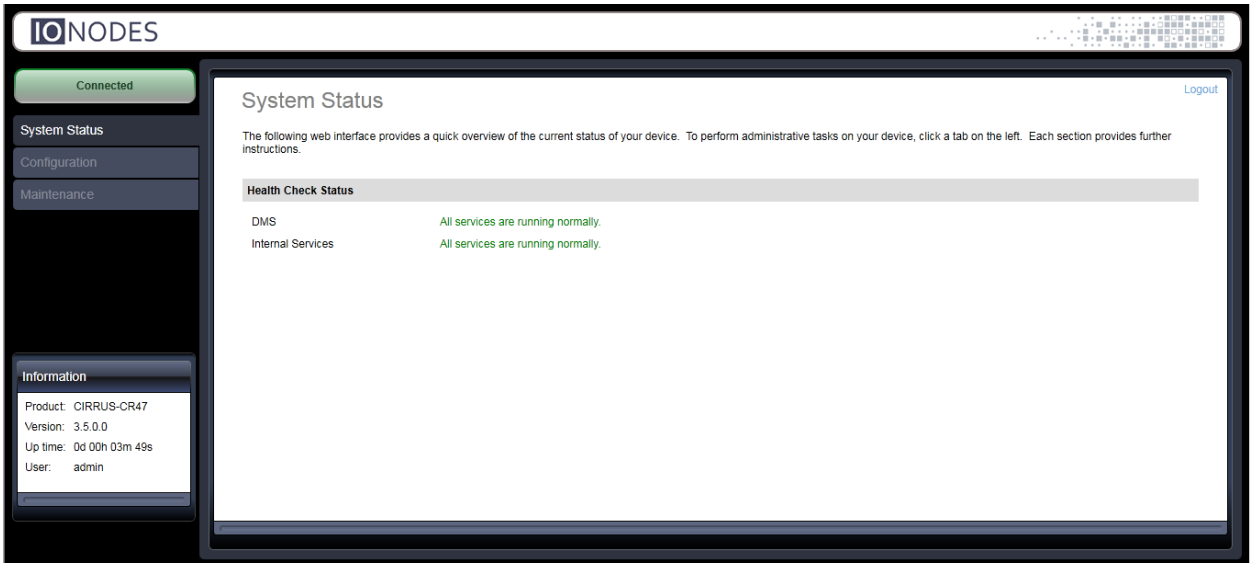
1. Using the **Device Config** shortcut on the desktop
2. Opening a web browser (Internet Explorer) window directly on the device and typing in the local IP address or host name. (http://127.0.0.1 or http://localhost)
3. Opening a web browser window on a remote computer located on the same network as the appliance and entering the IP address or host name of the appliance in the address box.

Once connected to the appliance's web Interface you will be asked to log in. If this is a first time access, use the default username and password; 'admin', 'admin'.



Note: IONODES provides a useful tool called the **IonConfigTool** which can assist in discovering the IP address of your appliances on your network. This tool can be downloaded from our website at http://www.ionodes.com

The appliance web interface provides the required tools to navigate and gather the appropriate information pertaining to your appliance.



Note: The appliance web interface requires a browser capable of running Microsoft Silverlight interfaces. If unsure if your browser supports Silverlight, please contact your IT administrator.

9.5.1 Connection Status

The appliance web interface provides feedback on the connection status to the appliance.

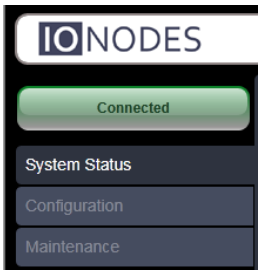
- Green and **Connected** means the web interface is logged into the appliance and can pass data to and from the device.

- Orange and **Processing** means the appliance is sending data to the web interface or vice versa.

- If the status button is grey and **Disconnected**, the appliance is no longer connected to the web interface.

9.6 Navigating through the web interface

Menu tabs are located on the left side of the main web interface window and give you access to the different web interface sections.



9.6.1 System Status

The **System Status** tab is selected by default at the time the page is loaded into the web browser. This tab provides access to the general status of the appliance.

9.6.2 Configuration

The **Configuration** tab takes you to the configuration pages of the appliance.
The main configuration page provides access to the main system configuration parameters.
More details are available in the

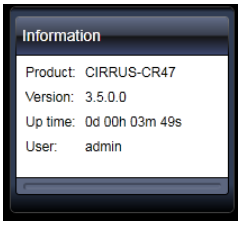
System Configuration section found further down in this manual.

9.6.3 Maintenance

The **Maintenance** tab allows you to access the functions used for troubleshooting and support of the appliance. More details are available in the System Maintenance section found further down in this manual.

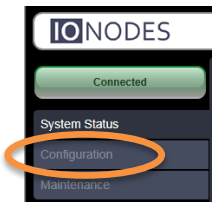
9.6.4 Information Box

The information box, located on the left side of the window, provides the up to date system information such as the product model, firmware version, system up time and logged in user.



10 System Configuration

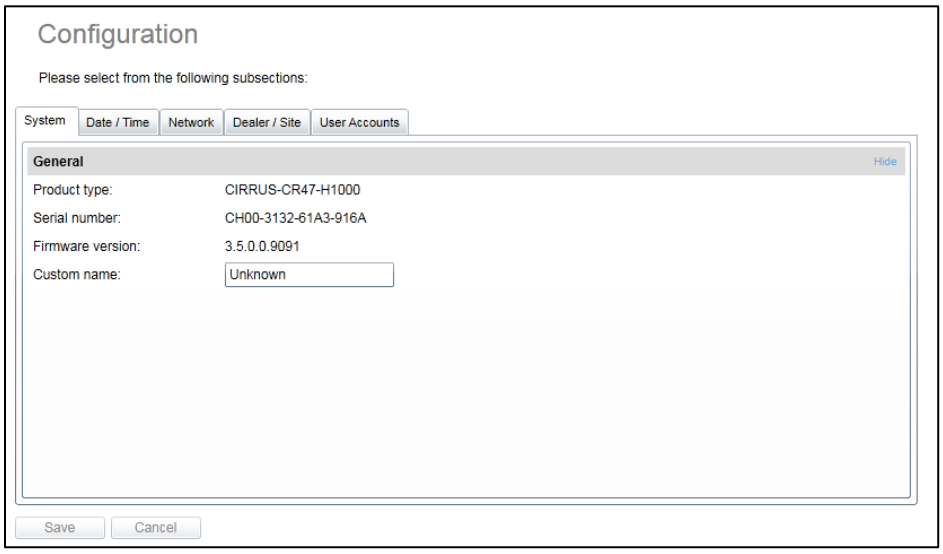
The configuration section of the appliance web interface provides the means to modify system parameters to meet your deployment requirements.



Note: For all configuration sections detailed below, saving a set of parameter changes is done via the **Save** button located at the bottom of the configuration page. Unsaved parameter changes can be cancelled using the **Cancel** button located beside the **Save** button. Cancelling parameter changes will cause these parameters to revert back to their original value.

10.1 System

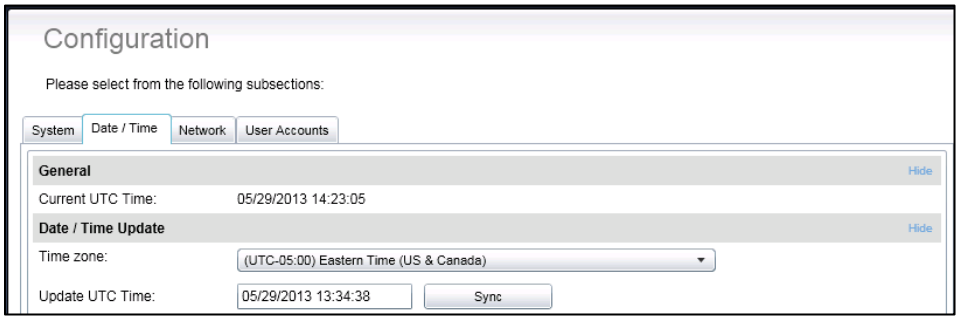
The **System** tab is the default landing page for the Configuration section of the web interface. This tab provides basic details on the system configuration including product type, serial number and firmware version.



The System Tab also provides a means to create a custom name for the system. To do this simply enter your custom name in the custom name box and click the **Save** button. The Custom Name can be used for identifying hardware in some VMS platforms or custom applications.

10.2 Date / Time

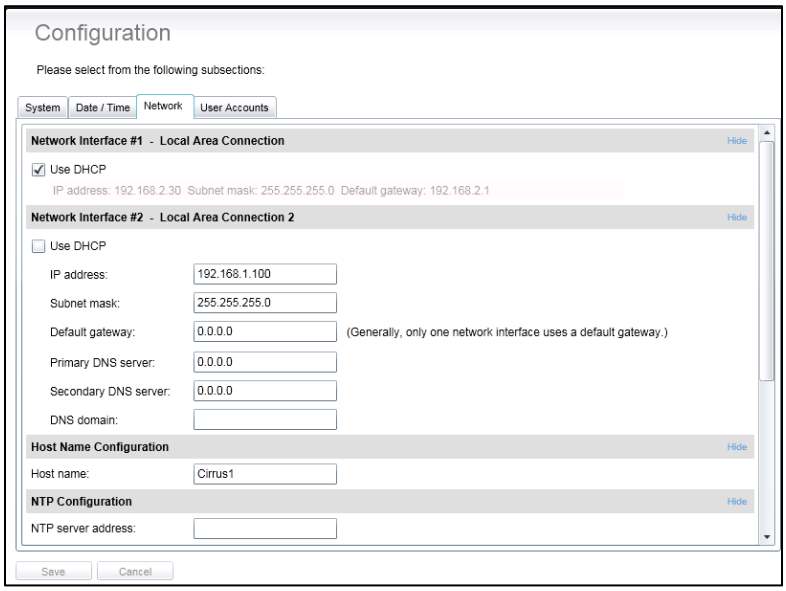
The **Date / Time** tab allows you to modify the system's date and time. Note that by default the device is the time zone is set to UTC.



1. Set the time zone matching your current region.
2. To update the appliance's system time:
    a. Use the **Sync** button to update the time to match the time on your computer (if running the web interface from a remote computer).
    or
    b. Enter the correct time manually into the **Update UTC Time** textbox.
3. Click the **Save** button to apply the changes.

10.3 Network

The **Network** tab allows you to set the network settings for both network interface(s) on the appliance.



10.3.1 Network Interfaces

As described in section 0, a typical deployment scenario will have network interface #2 (LAN2) setup on the corporate or enterprise network and will have network interface #1 (LAN1) setup on the camera or video surveillance network. Both network interfaces can be configured independently and can each be configured to use DHCP addressing (by interacting with an existing DHCP server) or can be configured to use static IP addresses. The default configuration for both interfaces is set to use DHCP.

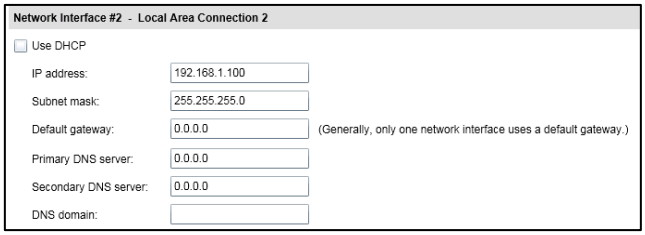
10.3.2 Using DHCP

If DHCP is to be used, simply select the **Use DHCP** check box for the network interface(s) that requires this type of configuration.

The appliance's IP address, subnet mask and default gateway will be assigned automatically and the current values for each will be displayed underneath the checkbox.

10.3.3 Using Static IP Addresses

To use a static IP address configuration:


Network Interface #2 - Local Area Connection 2
Use DHCP
IP address: 192.168.1.100
Subnet mask: 255.255.255.0
Default gateway: 0.0.0.0
(Generally, only one network interface uses a default gateway.)
Primary DNS server: 0.0.0.0
Secondary DNS server: 0.0.0.0
DNS domain:

1. Unselect the **Use DHCP** check box for the network interface you want to configure with a static IP address.
2. The IP configuration parameters window will appear.
3. Enter the desired IP address.
4. Enter the desired subnet mask.
5. Enter the desired default gateway if necessary. Note that a default gateway only needs to be specified if your network requires access to other subnets; otherwise leave to default value.
6. If available or required, add your DNS server information in the appropriate fields.

Warning: Specifying more than a single default gateway on your system can cause network communication issues. Please consult your IT administrator for assistance.

10.3.4 Host Name Configuration

To specify a network hostname for the appliance, simply delete the default name in the **Host name** field and enter a new one.

Using a network hostname can simplify remote connections to the appliance as you will not be required to know the IP address. This is particularly important in DHCP configurations as the IP addresses are subject to change based on the lease time specified by the DHCP server.

10.3.5 Using NTP Time Synchronization

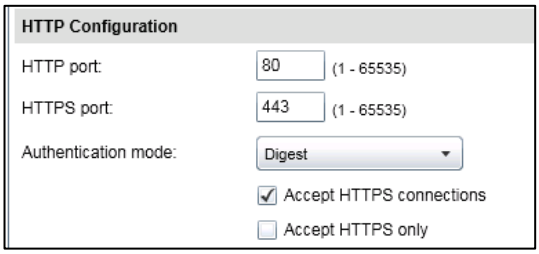
The appliance supports date and time synchronization via NTP protocol. To enable NTP, enter the address of a valid NTP server in the field provided.

10.3.6 HTTP Server Configuration

The HTTP port numbers provided are the standard default ports used by the appliance for the protocols listed.

- HTTP port by default is port 80
- HTTPS port by default is 443

These ports can be modified as required but should only be done if necessary and properly documented.



To select the authentication mode for the HTTPS connections, click the arrow on the **Authentication Mode** dropdown box to see the available choices. The available choices are **Basic** and **Digest** (Default).

To allow the appliance to accept secure HTTPS connections, select the **Accept HTTPS connections** checkbox.

To force all web connections to the appliance to use secure channels, select the **Accept HTTPS only** checkbox.

10.3.7 Bonjour Protocol Configuration

By default, the appliance is discoverable using the local domain.

If you need to segment device discovery into multiple domains, such as based on specific locations or functionality, a specific search domain can be provided.

You may disable Bonjour discovery by unselecting the **Bonjour Discovery Enabled** checkbox.

Note: Disabling the Bonjour discovery will prevent external software and tools, such as the IonConfigTool, from discovering your appliance on the network.

10.4 User Accounts

The **User Accounts** tab allows you to manage the list of system user accounts. These user accounts differ from the Windows operating system user accounts.

The Windows user accounts are in place for controlling access to the following:

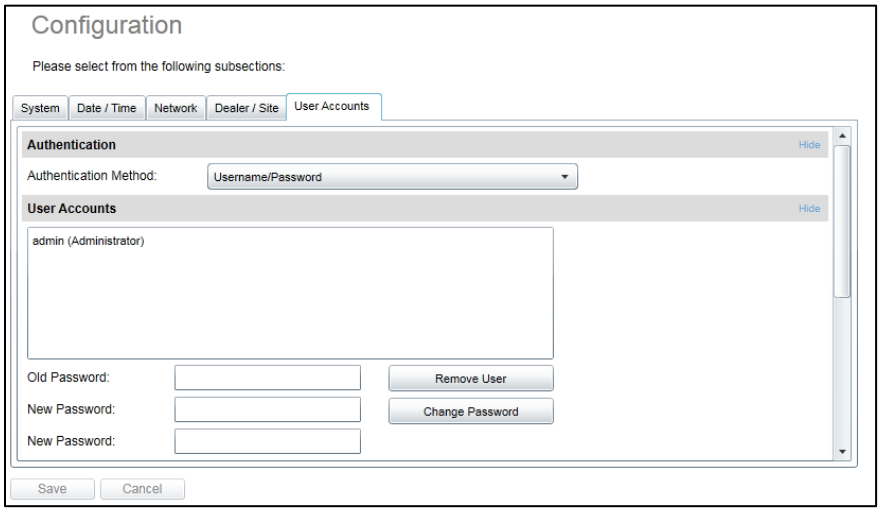
- Login to Windows interface, locally or remotely via remote desktop connections
- Features and functions of the operating system

The system user accounts discussed in this section are in place for controlling access to the following:

- HTTP based API – for integration to VMS and other software platforms
- Appliance web interface, local or remote access

Typically, Windows accounts are reserved for IT personnel while the system user accounts are set-up for system operators and security personnel.

Note: Changing the usernames and passwords of the Windows accounts will NOT affect the system user accounts; they are two separate sets of user account lists.



By default, the appliance contains only a single administrative user with username 'admin' and password 'admin'. The admin user account cannot be deleted; however, it is strongly recommended that you change the admin user password to avoid any unauthorized access to your system.

10.4.1 Adding a system user account

1. In the **New User** section, enter the desired **username**, **password** and **role** of the new user**.**
    a. The **User** role allows access to viewing only, no permission to change any settings
    b. The **Superuser** role allows access to viewing and changing any setting aside from the user accounts list.
    c. The **Administrator** role allows access to viewing and changing any setting in the system.

2. Click the **Add User** button.

3. Your request will be processed and a confirmation message will appear shortly after.

10.4.2 Changing the password of an existing system user account

1. In the **User Accounts** section, click on the user account for which you need to change the password.

2. Enter the **Old Password** as well as the **New Password** of the user into the required fields

3. Click on the **Change Password** button.

4. Your request will be processed and a confirmation message will appear shortly after.

10.4.3 Removing a system user account

1. In the **User Accounts** section, click on the user account you wish to remove.

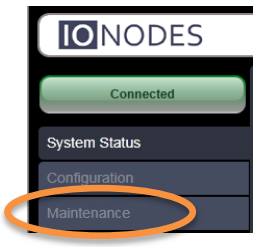
2. Click on the **Remove User** button.

3. Your request will be processed and a confirmation message will appear shortly after.

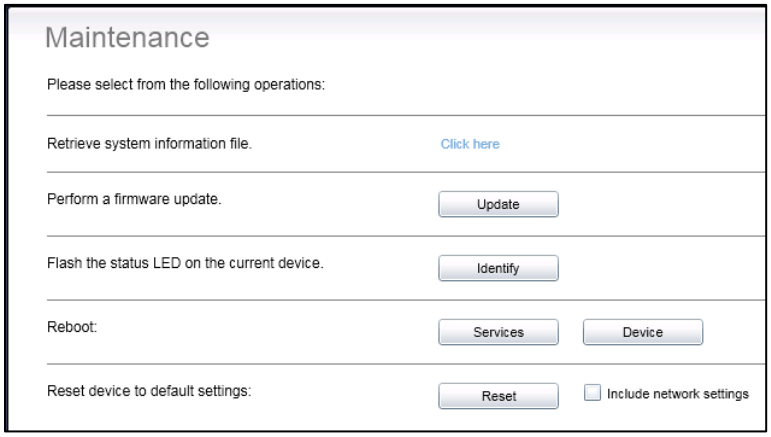
11 System Maintenance

Several maintenance tasks can be performed on the CIRRUS CR Series appliance via the web interface.

To access the available maintenance tasks, follow these steps:



1. Access the web interface locally or remotely. (see section 9.5)
2. Login with an administrator account.
3. Select the **Maintenance** tab on the left hand side of the Interface window.
4. The available maintenance tasks will be displayed.



11.1 System Information File

The first option on the **Maintenance** page is **Retrieve system information file**. Clicking on this maintenance task will cause the appliance to generate a system information file which can be saved locally on your computer.

The system information file is an archive file containing configuration and diagnostics details of your appliance. The archive contains details on unit configuration, performance statistics, firmware update history and health check status. The purpose of the system information file is to help IONODES technical support staff in troubleshooting and resolving any system issues.

To generate a system information file:

1. Click on the **Click Here** link to the right of the **Retrieve system information file** label in the Maintenance window.
    a. A second web browser window will open while the system information is being created.

2. Once the second browser window closes, the file download dialog will open and ask if you would like to Open, Save or Cancel.
    a. To save the file to your local computer, click the **Save** button
    b. Click **Cancel** to stop the operation
    c. There is no need to open the file as it contains password protected system information

3. Once the file is saved, it can be sent via email to IONODES technical support for analysis.

11.2 Firmware Updates

The second option in the **Maintenance** tab is the **Firmware Update** task which allows you to update your appliance to the latest firmware version.

To update the appliance firmware:

1. From the **Maintenance** window, click on the **Update** button.
    a. You will be asked for the firmware update file
    b. Select the .iof file which was provided by IONODES (can be found at www.ionodes.com)

2. The following status messages will be displayed during the update:
    a. Firmware upload in progress... (100%)
    b. Firmware uploaded. Saving to internal storage... (0%)
    c. Validating and decompressing firmware... (0%)
    d. Firmware ready for installation. Rebooting device... (0%)

3. The web page will disconnect from the device while it is being rebooted to apply the new firmware.

4. You will be prompted for login once the device is up again.
    a. The 'Testing firmware stability...' status message will be displayed while the system validates the new firmware.

5. The 'Firmware update complete. (100%)' status message will be displayed once the process is completed.

11.3 Factory Default Configuration

The fifth option in the **Maintenance** tab is the **Reset** task which allows you to reset your appliance to the factory default settings. Note that this operation will not reset your network settings.

To return your appliance to factory default:

1. From the **Maintenance** window, click on the **Reset** button.

2. The appliance will apply the default settings and may reboot to return to factory defaults.

12 System Image Recovery

In the event your system has become corrupted or unusable in any way, or you simply wish to reload your system to its factory default operating system image, the appliance offers an image recovery mechanism. This mechanism will restore your unit to the original factory deployed state.

Doing so will delete all data on the boot drive of the system; any applications or data files which were not part of the original factory image will be lost. No information on the internal or external video recording hard drive(s) will be affected by the recovery of the factory image.

This procedure must be performed locally with a mouse, keyboard and monitor connected to the appliance being restored.

1. Reboot your CIRRUS CR series appliance
2. During the initial boot up, continuously press on the F8 key on the keyboard
3. The **Advanced Boot Options** window will appear
4. Select the **Repair your computer** option
5. The operating system will start in **Safe Mode** and present the recovery application window
6. Click on the **Start Recovery Process** button to restore the factory image
7. Click **Yes** to confirm you want to proceed
8. The current system image will be deleted and replaced with the default factory image
9. Click **OK** to complete the recovery once the process has finished.

Once completed, the unit will reboot and once back online will be back to the factory image.

13 Getting Help

You can get help from the IONODES technical support team in many different ways:

- By sending an email to support@ionodes.com
- By calling our office during regular work hours at: +1 (450) 696-1060
- By sending a fax to: +1 (450) 506-0194

Our technical support team is trained to support you with installation as well as maintenance of your IONODES products.